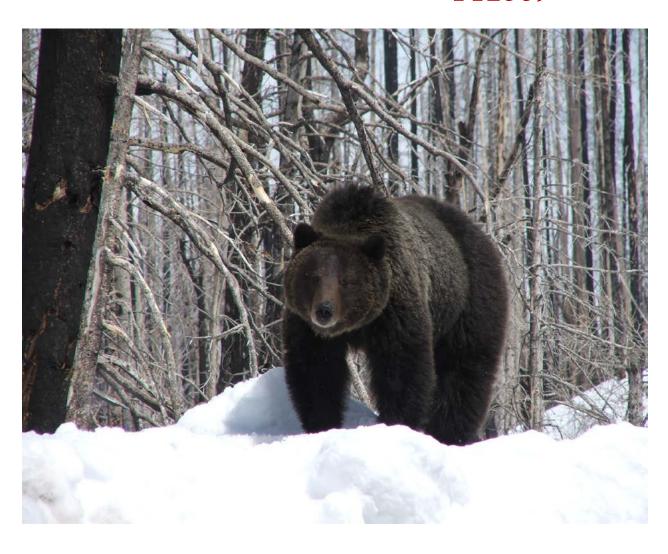


# SUPERINTENDENT'S ANNUAL NARRATIVE YELLOWSTONE NATIONAL PARK FY2007



# TABLE OF CONTENTS

Superintendent	2
Safety Services	3
Public Relations	3
Management Assistant	4
Planning, Compliance and Landscape Architecture	5
Administration	6
Concessions Management	11
Maintenance & Facility Management	14
Resources Stewardship	17
Resource and Visitor Protection	27
Interpretation and Education and Partnerships	34
Conclusion	39

# Superintendent's Office

In fiscal year 2007, the Superintendent's office consisted of Superintendent Suzanne Lewis (SES), Deputy Superintendent's Colin Campbell (GS15) and Chris Lehnertz (GS15), Executive Assistant Janice Laye (GS09), and Secretary and FOIA Coordinator Kerrie Evans (GS08). The Superintendent's offices are located once again in the newly refurbished and earthquake reinforced Administration building and now can be found on the third floor, north side.

Deputy Superintendents Colin Campbell and Chris Lehnertz joined the Yellowstone Management Team in February and quickly settled into their respective offices and many faceted portfolios. Colin handles the operations end of park management including, Maintenance, Interpretation, Safety and Resource and Visitor Protection divisions, while Chris leads the Yellowstone Center for Resources, Planning, Compliance, and Landscape Architecture, Administration and Public Affairs divisions.

# **Hot Topics**

- Bison Management
- Winter Use EIS
- 2016 Centennial Challenge Projects
- Mammoth School Closing

# VIP Visits/Events

The following individuals and groups visited Yellowstone that past year: General Tommy Franks, Retired; NPS Director Mary Bomar and Chief of Staff, Sue Masica; Mr. and Mrs. Adachi from Canon, Inc.; Mr. Gary Urwiler, President of Mooseheart; The ICUN Group, Inc. Conference (World Conservation Union); the National Preservation Center for Training and Technology Board meeting; Unilever President, Ken Havelock; and Dan Reicher, former President Clinton Deputy Chief of Staff. The NBC Today show broadcasted live from Old Faithful Inn and Tom Brokaw interviewed the Superintendent.

The Superintendent traveled to Washington D.C.; Denver, CO; Cheyenne, Casper, and Cody, WY; Idaho Falls, ID; New York City; Minneapolis, MN, Alexandria, Virginia; and Helena, Montana to take part in business meetings and events. The Superintendent traveled with the Yellowstone Park Foundation staff to Lexington, Kentucky and Cincinnati, Ohio, for fundraising and informational events. Executive Director for the Yellowstone Park Foundation Michael Cary left the Foundation this year and Paul Zambernardi took his place.

The Superintendent's Office processed 95 VIP reservations for lodging in the park, 16 Yellowstone Chapel reservations, and the FOIA Coordinator responded to 15 FOIA requests which included a variety of topics including stock impacts on backcountry trails, employment rating process, employment statistics, campground registrations, wireless communications, bear-related records, and Lake water supply/wetland compliance. There were 43 Congressional responses prepared from requests coming directly from Washington D.C. or directly to the park.

Superintendent Lewis was honored by First Lady Laura Bush who invited her to sit in her box for the State of the Union Address on January 23, 2007.

# Safety Services

Ken Meyer arrived in FY2007 as the new Risk Manager (GS12/13). Tina Bower held the position of Safety Assistant at (GS07). Tina Bower resigned this year and Deborah VanDePolder from the Management Assistant's Office, was hired to take over her duties (GS06).

Ken's duties focused on a near fatal accident when he first arrived; he audited injury cases, and began the implementation of the CA-17 Duty Status Report for reporting all employee injuries.

The injury rate in Yellowstone in FY2007 was reduced by 35%. The DART Rate was 3.2.

# Public Relations

In fiscal year 2007, the Public Affairs Office consisted of four employees: Al Nash, Chief of Public Affairs, Stacy Vallie, Public Affairs Specialist/Film Permit Coordinator, Karen McEneaney, Public Affairs Assistant/Film Permit Monitor, and Linda Miller, Secretary.

In fiscal year 2006, 104 press releases were issued on a wide variety of issues, some of which were very controversial and sensitive in nature, such as winter use, bison management, wildfires, northern Yellowstone elk counts, elk poaching, fatalities bear mauling, mudslide along East Entrance Road and relocation of a problem bear. In addition, releases were issued on other less controversial topics such as the Youth Conservation Corps program, electronic field trips, Artist Point restoration work and the Centennial Challenge.

The Public Affairs staff also addressed hundreds of Congressional, media and public information requests relating to these issues, as well as many other issues such as park visitation, Sylvan Pass avalanche operations, road construction, road-killed wildlife, the Old Faithful cell tower, delisting of the gray wolf and the grizzly, microbes, the park's budget, infrastructure and staffing levels and the park's volcanic activity.

Winter use continues to be on the forefront of park issues, drawing local, regional, national and even international attention. Winter use is a very complex, controversial and perpetual issue, requiring an extensive commitment of Public Affairs staff time. Many long hours were spent fielding Congressional, media, public and staff requests for information on these issues, as well as keeping Washington staff apprised, attending meetings and holding conference calls with cooperating agencies, public affairs officers and community leaders. With the legal complexities of winter use came the need for proactive planning, rollout strategies, media plans, and developing employee talking points and question and answer sheets.

Bison management is yet another controversial issue that requires an extensive time commitment from Public Affairs staff -- fielding calls from various groups and individuals with very strong views and reactions to the bison issue, in addition to hundreds of media, Congressional, public and staff requests for information. The Public Affairs Office also provided media opportunities to observe capture operations at the Stephens Creek facility and attended meetings with the Interagency Bison Management Planning Committee and cooperating agency public affairs staff.

Approximately 350 requests for commercial filming, photography and sound recording permits were received in the Public Affairs Office in Fiscal Year 2007, resulting in the issuance 89 permits. Extensive planning, monitoring, location scouting and research went into these projects. Considerable time was also spent on filming and photography proposals where no permits were issued. The majority of the permits

issued in fiscal year 2007 were for documentaries on topics such as winter use, grizzlies, wolves, bison and the supervolcano. Other filming included documentaries on the natural history of Yellowstone, fly fishing videos, various travelogues, and segments for the David Letterman show and Jeff Corwin.

# Management Assistant

In 2007, the Management Assistant's Office, within the Office of the Superintendent, continued to focus primarily on the winter use issue for Yellowstone and Grand Teton National Parks. John Sacklin, Mike Yochim, and Denice Swanke staffed the office. Planning Assistant Debbie VanDePolder moved to the park's Safety office in the spring, and she was replaced by Kevin Franken in September.

# Temporary Winter Use Plan

The parks operated for the third and final year under a temporary winter use plan that was approved in November 2004. The temporary plan allowed 720 commercially-guided, best available technology (BAT) snowmobiles in Yellowstone and allowed 140 in Grand Teton and the John D. Rockefeller Jr. Parkway, the majority of which were to be BAT snowmobiles. The Grand Teton/Parkway snowmobiles did not have to be commercially guided.

The temporary plan was developed to provide certainty regarding winter operations in the parks for communities, businesses, concessions, and park staff, to provide time to prepare a new long-term winter use plan, and to respond to court actions. Separate U.S. District Court rulings set aside the 2000 and 2003 winter use decisions, and the U.S. District Court for the District of Columbia directed in June 2004 that a plan be in place prior to the start of the winter use season in December 2004.

Two lawsuits on the 2004 plan were still active in 2007. First, the Fund for Animals had filed suit on December 15, 2004, in the U.S. District Court for the District of Columbia, alleging the temporary plan did not adequately consider the impacts of road grooming on bison. The court denied, without prejudice, both the Fund's and the U.S. Department of Justice motions for summary judgment on March 15, 2006. On September 15, 2006, the Fund for Animals filed a new motion calling for implementation of the Cormack Gate's Report recommendation regarding a bison-road experiment (see below) and also challenged the denial of the Bluewater Network's rulemaking petition to ban snowmobiles from all national parks. On September 24, 2007, Judge Sullivan ruled in favor of the NPS.

In the second, still active litigation, the group Save Our Snowplanes had filed suit on March 29, 2005, in the U.S. District Court for the District of Wyoming, alleging the decision to ban snowplanes from Jackson Lake in Grand Teton National Park violated the Administrative Procedure Act. On June 27, 2007, Judge Downes in Casper, Wyoming, ruled in favor of the NPS. The ruling has been appealed to the Tenth Circuit Court of Appeals in Denver, and the case is pending.

As part of FY 2007 appropriations legislation, Congress directed that the 2004 decision and rule be in effect for the 2007 fiscal year, giving the decision the force of law (continuing similar appropriations action from 2005 and 2006).

### New Winter Use Plan

The office continued to prepare a new long-term winter use plan and Environmental Impact Statement (EIS) in 2007 and completed a Cooperating Agency review draft EIS in November 2006, a public review Draft EIS in March 2007, and a Final EIS in September 2007. The Cooperating Agency review draft EIS was reviewed by the three states of Wyoming, Montana and Idaho, five counties, the EPA, and the U.S. Forest Service between late November 2006 and early January 2007. The NPS held a Cooperating

Agency meeting in December 2006 in Cody, Wyoming. The Draft EIS was on public review between late March and early June 2007, and the NPS held four public hearings (West Yellowstone, Montana; Cody, Wyoming; St. Paul, Minnesota; and Denver, Colorado). In addition, the NPS held a Cooperating Agency meeting in Idaho Falls, Idaho, in May 2007. The NPS completed an internal review draft of the Final EIS in July and released the FEIS to the public in September 2007.

A proposed regulation to implement elements of the preferred alternative in the Draft EIS was published in the *Federal Register* in May 2007.

The park continued to implement the public engagement plan throughout the year. Approximately 20 roving team meetings with interested parties and presentations occurred in 2007 (in addition to the Cooperating Agency and public meetings, noted above). The team oversaw or contributed to a wide variety of reports, studies, and projects for the winter use plan in 2007, including avalanche analyses and an operational risk management assessment for Sylvan Pass; air quality, soundscapes, and wildlife monitoring reports; public comment analyses on the Draft EIS and proposed rulemaking; the public involvement and agency participation plan; economic analyses for the EIS and rulemaking; the Clean Snowmobile Challenge 2007; and completed a site inspection, compliance and interagency coordination for installation of the Hoyt Peak weather station.

The park also continued to follow up on the May 2005 report by Dr. Cormack Gates entitled "The Ecology of Bison Movements and Distribution in and beyond Yellowstone National Park." In summary, the report concluded that road grooming is not the major factor influencing bison distribution and range expansion, and available evidence strongly suggests that groomed roads that align with natural movement corridors have not changed population growth rates relative to what may have happened in the absence of road grooming. The study does note that one short road segment through Gibbon Canyon (between Madison and Norris) does not align with natural movement corridors and might facilitate bison movement from the central range to the northern range. The report recommended an experiment be implemented to evaluate this hypothesis. To follow up on the recommendation, Dr. Robert Garrott of Montana State University and Dr. P.J. White of Yellowstone National Park prepared a study design to evaluate bison use of the Madison to Norris road corridor.

## Other accomplishments

Mike Yochim continued writing an administrative history of the Yellowstone's winter visitor use issue, tentatively titled *Snowmobiling in Wonderland*. Mike also published "A Water Wilderness: Battles over Values and Motorboats on Yellowstone Lake" in *Historical Geography*, which covers the conflict over NPS attempts to ban motorboats from the arms of Yellowstone Lake around 1960.

Denice Swanke's paper "Social Dynamics of Yellowstone's Snowmobile Controversy," which explored the public engagement process between the NPS, cooperating agencies and other stakeholders during the current winter use planning effort, was presented at the biennial George Wright Society Conference in St. Paul, Minnesota, and published in the conference proceedings. In May 2007, Denice graduated from the University of Montana with the degree of Master of Public Administration.

# Planning, Compliance and Landscape Architecture

Developed, funded and implemented a planning charrette for the Lake Area including academic
and private partnerships yielding collaborative, creative potential solutions to existing planning
issues.

- Continued to develop a park wide comprehensive planning template using the Tower-Roosevelt Area for comprehensive planning and associated environmental assessment.
- Finalized the plans, including the cultural landscape inventory with WYSHPO concurrence, for the treatment and restoration of a significant cultural landscape at Artist Point. Funding was secured through a partnership process and involved Federal Lands Highway Program funding and funding donated through the Yellowstone Park Foundation. The \$ 6 million project was bid and constructed during the 2007 year construction season resulting in a beautifully restored area, which provides for an enhanced visitor experience in a location critical to Yellowstone National Park and the National Park Service.
- Continued construction and water monitoring on the \$38 million dollar East Entrance Road project and the project development for the \$21 million dollar Gibbon Canyon Road.
- Managed all budgets within projections including the FLHP park wide budget for all projects.
- Managed the park wide sign program, produced 850 signs for park wide installation.
- Developed revegetation materials for the park restoration projects through the park nursery and contracted services.
- Documented the first Historic American Landscape Survey (HALS) site in the state of Wyoming: the historic front row cottonwood trees.
- Continued the night lighting installation of compatible lighting fixtures at the Lake Hotel.
- Implemented compliance for park including park wide biological assessment, Wildland Urban Interface, cultural landscape inventories for 3 locations, and various categorical exclusions. Developed the initial scoping and documentation for the Wireless Communication Services Plan Environmental Assessment.
- Met or exceeded all GPRA goals for FY 07 for cultural landscapes and e-commerce
- Participated in CORE operations for the park resulting in a reduction of divisions and the dissolution of PCLA division.

### Administration

### Budget, Finance, and Central Fee Collections

FY2007 was a record year for Yellowstone spending and revenue as tracked in 19 fund sources and 825 accounts. The park obligated a total of \$77.29M, including \$30.96M in base funds, \$22.65M in other appropriated funds (Line Item Construction, ONPS projects, and Repair/Rehab.), \$7.47M in visitor, special use, filming, and concessions franchise fees, \$6.89M in concessions utilities and other reimbursable accounts, \$2.35M in donations and grants, \$1.85M in Federal Lands Highway Program support funding, \$3.35M for wildland fire, and \$1.77M from government furnished quarters and school accounts.

The staff of the Budget, Finance, and Central Fee Collections branch of the Division of Administration led park-wide budget programming, execution, and accounting activities through the Budget Focus Group in support of the park Management Team and Division budget staff. Significant budget and financial changes for the year included full implementation of accounting changes under the Federal Lands Recreation Enhancement Act of 2005, and updating of Centennial Challenge and Centennial Initiative funding requests during the FY08 appropriations cycle.

The summer of 2007 was very hot, with high stream temperatures resulting in closures to popular fishing areas and a drop in revenue from permits. By mid-summer, the park was developing a contingency budget plan for potential drops in permit revenue of 10-30%. As cooler temperatures returned late in the summer, permit revenues rebounded and ended the year down just 4% from FY06.

Through careful management of park-wide funds and position lapse funds pulled from divisions, the park approached the end of the fiscal year with a great deal of budget flexibility. FY07 saw the cost of heating and vehicle fuels rise dramatically. After covering shortages in programming for fisheries and fuel costs in Maintenance, the park had nearly \$500,000 available to invest in much needed fleet replacement (2 ambulances and 7 other vehicles), upgrade of 3 all-terrain vehicles to safer models needed for resource management operations, and several pieces of specialized equipment needed for division operations.

In October 2006, the park submitted its completed Core Operations Activity Analysis report to the Regional Director. This document was built on many months of analysis and budget forecasting, chiefly conducted by the park's Budget Focus Group to produce a Budget Cost Projection (BCP) for the park. This plan represented nearly two years of work by the Management and Budget Teams, and its submission started the process of preparing for a one-year follow-up report due in the fall of 2007. The Core Ops analysis documented a projected base operations short-fall of \$5.8M by FY2010, in order to maintain core services at FY05 levels across a five year period. The purpose of the Core Ops one-year report was to re-examine park operations, look for efficiencies that could be achieved by FY2010, develop target organization charts, and re-run the BCP model to include the projected efficiencies and changes to the target organization. The analysis needed to produce the one-year report by November 2007 was carried out by the Budget Focus Group during FY07, and ultimately produced a BCP showing the shortfall reduced to \$1.96M by FY2010. This monumental effort marked a significant change in thinking for park budget staff, which are now looking further toward the future than ever with a keener eye on budget projections and cost management.

In May 2007, staff from the Accounting Operations Center performed an audit of property management, finance and accounting, procurement, payroll, heritage stewardship, and environmental liabilities. Among the seven areas audited in Finance most were noted as being in good shape, with recommendations to improve tracking of certification for capitalization of completed assets, increase timeliness of deposits, regular and timely reconciliation of PCCN credit card revenue reports, administrative review of receipt, deposit and recording functions, timely issuing of dunning notices in compliance with the Debt Collection Improvement Act, and appropriate follow-up on Third Party Draft checks issued but not cashed within 60 days. Staff began immediate changes in response to audit findings, in preparation for a presumed one-year follow-up audit by KPMG contract auditors.

Staff changes in FY07 included the departure of Joy Perius, Finance Officer, who transferred to the Division of Interpretation in August. Vanessa Taliaferro-Robinson, Administrative Officer at Martin Luther King, Jr. NHS served as Acting Finance Officer on a 120-day detail, starting in September.

# Workload statistics for FY2007 included:

WORKIOAU Statistics for 1 1 2007 included.		
Travel Vouchers	1,341	
Training Forms	47	
Permanent Change of Station Travel Vouchers	18	
Bills of Collection	671	
Official Receipts	311	
Pre-Authorized Debits	288	
Deposits (both fees and administrative)	211	(totaling \$18.1M)
Income Transfers (credit card income)	25	
Third Party Drafts issued	619	(totaling \$115,223)
Excise Tax refund reports	10	(totaling \$22,720)
Utility payments	345	(totaling \$1,099,432)
Miscellaneous vendor payments	330	(totaling \$90,584)
GSA Rental payments	12	(totaling \$278,500)

GSA Fuel reimbursements	12	(totaling \$80,416)
GSA Work order payments	15	(totaling \$3,948)
AD Payments (incidental employees)	54	(totaling \$66,382)
Tort Claims	9	(totaling \$5,161)
Quarters to Account ETs	6	(totaling \$129,078)
OAS Payments	42	(totaling \$488,104)
Number of Charge Card Holders	370	
Number of Accounts tracked	825	
Number of Fund Sources Managed	19	

# Office Services

In 2007 Office Services lost the summer seasonal position leaving us with a staff of two. Beginning when we moved back into the Administration Building, we discontinued the two daily mail runs delivering mail to the various offices. We were able to borrow two people from the fee collection office for 2 hours a day during the summer months to assist with printing and copying requests.

During the year we processed 24,336 pieces of outgoing mail through the mail meter machine for Yellowstone National Park. 524 pieces were sent by certified mail requiring extra handling time and costs.

Required background checks cost an additional \$1,640.83 for Human Resources letters sent out certified mail with return receipts.

We spent \$273.75 mailing 93 lost and found packages. This was 260 fewer packages than were sent the previous year and \$1,047.99 less was spent on postage.

\$218.89 was spent mailing 29 packages of fishing permits to vendors for them to sell, down from 2005 when 44 packages were mailed out at a cost of \$369.28.

3,433 informational packets were mailed by bulk mail amounting to a savings to the government of \$460.15 and \$1,034.49 trimmed from Yellowstone's postage budget. The number of informational packets sent increased by 228 over the number mailed out the previous year. Another 17,226 pieces of mail were sent out using presorted, automation methods to cut \$18,605.85 from Yellowstone's postage budget. Time spent doing bulk-mailings is money saved from Yellowstone's postage budget. Our staff is very conscientious and continually strives to do business in the most cost-effective manner.

Our incoming mail included 59,090 letters; 45,985 flats, and 2265 parcels for a total of 107,340 pieces of mail that was picked up from the post office, sorted and distributed. Because of an error in recording the totals for 2006 it looks like a marked decrease when in fact it stayed relatively stable. This figure does not include inter-office mail that was sorted and distributed.

A total of 2,762,667 copies were run on the two high-speed copiers in the mailroom and another 80,315 color copies were made.

808 pieces of outgoing correspondence were logged into the database then filed into the central files system for the year 2007. Totals were not kept of the newspaper clippings, all employee notices, etc. that were also filed.

# Summary

Total incoming mail: 107,340

Total outgoing mail through mail meter: 24,336 (decrease of 7,038)

Total outgoing mail sent bulk: 20,659 (decrease of 30,466)

Total color copies: 80,315 (increase of 1,809)

Total black & white copies: 2,762,667 (decrease of 859,985)

### Technology Services

Fire Alarms - Install 5 complete new systems

Fire Alarms - Initiated code required annual Inspection, Testing & Maint Program

Radio Systems – 2 new repeater sites (Survey Peak, Henderson Mtn). Replace 2 sites (Purple, Holmes)

CCTV – 2 new systems (36/Finance, Jail)

Security Systems – 11 Systems (5 OF W/WW, Canyon W, Madison Lift, Norris W, 36, Finance1, Finance2)

NICET Certifications – 4 employees obtained or increased NICET certifications

Panic Buttons – 2 Buildings equipped (Albright VC, 36)

Building Access Systems – 2 Systems installed/configured (B38 Server, B36)

Audio Visual – 2 Systems setup (36, Garage)

IT – New Park wide backup system implemented

IT – Connected 15 new buildings/areas to network/High Speed (4 Norris, 5 W, 5 WW plants, West Mt)

Fuelmaster – Installed 4 new systems (Grant, Norris, OF, Canyon)

Qwest – Established significant partnership, saved \$50k in FY07

Phones – Installed VOIP across interior of park (120 phones, 20+ buildings), saved \$10k on phone bill

Construction – Full setups for Canyon Ranger Station, Bldg 36, planning stages for 5 others

Cabling – Recabled 20 buildings in park interior, 10 more in Mammoth for VOIP/New Computers

Radio Systems – Completed 1 new back country cabin setup (Daly Creek)

Cell Phones – Negotiated new contract, pooled minutes, saved \$37k off bill

### **Contracting Office**

### **IDEAS** Training

Training for use of the IDEAS system was accomplished in November 2006. Approximately 162 Yellowstone staff attended eight sessions. This allowed for the total conversion to the IDEAS system effective on January 1, 2007.

### Purchase Request Processing

The contracting office processed approximately 1136 purchase requests with a total dollar amount of \$39,791,607.

John Chaney, and Trudy Haney achieved FAC-C (Federal Acquisition Certification in Contracting Program) Certification, and obtained their initial Certificate of Appointments (formerly Warrant) with authority for actions up to \$10,000,000. Patty Oestreich obtained her FAC-C Certification, and maintained her Level I Certificate of Appointment for actions up to \$100,000. The intent of the FAC-C program is to ensure that all contracting professionals throughout the Government are properly trained and qualified to effectively conduct the acquisition business of the Government. A similar program has existed in the Department of Defense for over a decade and is now being implemented in the civilian agencies, as required by the Clinger-Cohen Act. Contracting staff must be FAC-C certified in order to be appointed as a Contracting Officer. The FAC-C program establishes the minimum education, training, and experience requirements for contracting professionals in civilian agencies.

Major Construction and A&E Contracts awarded in fiscal year 2007

Justice Center, C1574070056 for \$5,677,000.00

Swank Enterprises – Valier, MT

West Contact Station, C1574070053 for \$1,196,166.00 Lane & Company – Cortez, CO

West Entrance Station, C1574070037 for \$3,789,753.00 SE/Z Construction – Idaho Falls, ID

OFI Phase III – Reroof, C1574070054 for \$2,492,295.80 Eagle Rock Timber – Idaho Falls, ID

OFI Phase III – Interior, C1574070055 for \$6,616,557.00 A4 Construction – Salt Lake City, UT

Architects and Engineering IDIQ, CTA Architects, 157707A401 \$12,000,000.00 maximum

Architects and Engineering IDIQ, A&E Architects, 157707B401 \$12,000,000.00 maximum

Architects and Engineering IDIQ, BRS & DHM, 157707C401 \$12,000,000.00 maximum

Architects and Engineering IDIQ, RTW Architects, 1577070402 \$12,000,000.00 maximum

### **Human Resources**

Leave Share Recipients	9
Background Investigations completed	462
Drug Tests completed	180
Orientations (parkwide)	3
New Employee individual orientations	19
Retirements	17
(estimates)	72
Death	1
OWCP cases	101
Tel Trainings	120
Training Hours	15,622
Volunteers	2558
Volunteer Hours	110,274

Announcements	95
Apps Rec'd	4137
Positions Filled – perm/term	41
FPPS actions	2751
Classifications	48
EO Complaints	3
Grievances	1
Mediations and counseling sessions	5
Disciplines	9
PIP	1
Hardship Transfer	None

# **Concessions Management**

The primary role of the Concessions Management Division is to provide oversight for the commercial operations within the park, which includes protecting and preserving over 900 facilities assigned to concessioners, many of which are historic. The Concessions Management Division ensures there is an opportunity for park visitors to have a quality experience in commercial facilities and participating in commercial activities within Yellowstone National Park. Yellowstone National Park's Concessions Management Division has professionals on staff that is often requested to serve on national task forces, provide leadership as instructors in NPS training, and provide leadership and guidance at national meetings and to WASO staff, Regional staff and other parks.

The Concessions Management Division has taken the lead in developing a concessions management system to schedule condition assessments, track possessory interest and determine leasehold surrender interest for all assets assigned to commercial operators. The National Park Service spends approximately \$250,000 annually for condition assessments to evaluate buildings and determine deferred maintenance. Xanterra Parks & Resorts and Delaware North Parks and Resorts submit annual projects which identify the curing of those deficiencies. Each concessioner also develops a five year strategy to identify capital projects which will impact the Repair and Maintenance Reserve as well as capital improvements as identified in their concession contract facility improvement programs. Concessions Facilities Improvement Programs and Maintenance Reserve funding are instrumental in the preservation of facilities. Major renovation has occurred at the Old Faithful Inn with structural, seismic and room reconstruction completed on the East and West Wings (Old House, lobby and dining areas). Funds available to complete this project were both NPS and Concessioner. Additional capital improvement projects have been approved or are identified in their planning documents such as renovation of the Old Faithful Lodge lobby and offices, renovation and stabilization at Tower Fall Store and the Lake Store.

Concessioners also submit cyclic projects which include a cyclic plan for building maintenance and repairs.

# Staffing

Permanent Full Time

Chief, Business Management Division, GS-1101-14 (Jennings)

Concessions Management Specialist, GS-1101-13 (vacant)

Business Management Analyst, GS-1101-12 (Murphy)

Architect GS-801-11 (Dawson) STF

Concessions Management Specialist, GS-1101-11 (vacant)

Concessions Management Specialist, GS-1101-09 (vacant

Concessions Management Specialist, GS 1101-07 (Williams)

Concessions Management Specialist, (Database Mgt.) GS-1101-09 (vacant)

Term/Seasonal Positions Financial Analyst GS-1101-11 (vacant) Administrative Assistant GS-5 (vacant) Seas

Other Positions

Sanitarian (Public Health Service) GS-11 (Larsen)

The four major concessioners (Xanterra Parks & Resorts, Delaware North Parks and Resorts, Medcor, and Yellowstone Park Service Stations), the winter operators (snowcoach and guided interpretive snowmobile tours) and summer backcountry outfitters and guides earned in excess of \$90 million in gross receipts in 2007.

Condition Assessments are conducted annually on approximately 20% of the concessioner assigned buildings in the park. This allows the NPS to complete updated conditions assessments on all buildings every 5 years. The goal of the service is to conduct these assessments on a location basis, lowering contracting fees and allowing the NPS to take a strategic look at facilities and planning of developed areas. These assessments included facilities such as the 100 year-old, Old Faithful Inn to a small storage shed. All data was entered into the NPS FMSS system. It is estimated that the concessioner is assigned facilities with an estimated replacement value of nearly \$300 million. A schedule of condition assessments was established which allow the park to complete comprehensive condition assessments on a five-year cycle. The schedule identifies the Lake/Bridge Bay/Fishing Bridge area for review in 2007/2008 and the Canyon developed area in 2008/2009.

Annual Overall Evaluations were completed for all concessioners and only two were found less than satisfactory based on contract compliance; none were found marginal or unsatisfactory for visitor services. Concessioners provide some type of visitor service year-round. Delaware North Parks and Resorts provides a year round store at Mammoth; Medcor provides year-round medical services with a clinic at Mammoth and pay-at-the-pump gas services are available at Old Faithful, Canyon, Grant Village and Fishing Bridge. Pay at the pump gas services are proposed for all stations by the summer of 2009. Xanterra operated 250 days during 2007. Yellowstone Park Service Stations had gas services staffed for 165 days. Medcor provided medical services at Old Faithful and Lake for 150 days. Outfitters and Guides operated from June 1 through October; though there was not trips everyday; these trips are dependent on trail conditions and weather; and winter operators (snowcoach and snowmobiles) offered guest services from December 19 to March 10. Winter snowcoach operators provide summer transportation as well. Overall complaints were at a minimal level (less than 40 complaints) for operations.

Xanterra Parks and Resorts is operating under a five-year concession contract executed on December 1, 2005. The contract will expire on November 30, 2010. Xanterra provides lodging, food and beverage service, merchandising, transportation, marina services, among other general visitor services. Through a Concessions Facility Improvement Program, Xanterra has completed renovation of 80 western cabins in the Canyon area. An annual and five year maintenance plans were submitted by Xanterra Parks & Resorts outlining their capital improvement, cyclic and routine maintenance projects. The NPS review these plans, and is working with Xanterra to prioritize projects.

Delaware North Parks and Resorts operate the Yellowstone General Stores. Their contract expires on December 31, 2017. They have completed renovation of the stores at Old Faithful (Upper and Lower Stores), Fishing Bridge and Canyon Village. Renovation and stabilization projects are on line for 2009 which include the Tower Fall Store, Lake General Store, and a men's dorm at Fishing Bridge, and renovation and accessibility for the Mammoth General Store. Renovation included researching and returning the stores to a historic concept; including structural review, replacing flooring, renovating bathrooms, merchandise space and eating areas.

Yellowstone Medical Services, (Medcor) is operating under an extension of one year to provide medical services within the park. A prospectus will be issued in 2008 to continue these services. It is apparent that the medical services are critical to the park visitors, but are essential to park employees and residents of the greater Yellowstone Area. Xanterra provides critical support to this contract to ensure services are available to their employees. Medical care and the appropriate mechanism to obtain it is a Servicewide concern; concession contracts in parks do not appear to be economically feasible.

Yellowstone Park Service Stations (Conoco-Phillips/McSpadden) is operating under a one-year extension. A new long term contract has been offered to the existing operator (Yellowstone Park Service Stations) which will be effective November 1, 2008. Pay-at-the-Pump service is being reviewed for Mammoth and Tower stations. Yellowstone Park Service Stations will end their long term contract with Conoco-Phillips and will be entering a new contract with Sinclair to provide fuel to their stations in November.

Winter Operations continue to be driven by the courts and final ruling on winter use. The guided interpretive snowmobile operators are under Commercial Use Authorizations with a term of up to two years. Snowcoach operations are under 10-year contracts. An allocation of 720 snowmobiles per day was set and each snowmobile operator was given an allocation. There were many days this season where the maximum allowable allocation was not reached.

Backcountry Outfitters and guides were issued 10-year concession contracts in March of 2004. Forty-seven outfitters offer backcountry guided trips throughout the park. Operators offer both overnight and day trips and concessioners are providing a wide range of services. Some operators are only doing minimal trips (two-day trips per year) were others are providing extensive visitor services with more than 50 day trips and 20 overnight backcountry trips.

Commercial Use Authorizations have been under a moratorium for approximately 14 years. The moratorium was in place pending a new commercial services strategy. Public Law 105-391 changed IBP's to Commercial Use Authorizations; regulations have not yet been issued for these permits. One hundred thirty five companies are under Commercial Use Authorizations providing services that range from guided fishing, backcountry day hiking, towing, photography and artist workshops, and front country interpretive tours to wildlife tours. Approximately 165 operators are on a waiting list for a CUA. The moratorium was lifted for transportation services and towing which have minimal or no impact on park resources. Though there is some limit on most services, the park is reviewing its strategy on issuance of permits.

# Maintenance and Facility Maintenance

### **Environmental Issues**

The Yellowstone Park Foundation funded an initial "investment" for Yellowstone to expand and take its EMP to the next level by securing the services of Ecos Sustainability Solutions, Inc. In the summer of 2007, Ecos worked with Yellowstone to assess current park operations and facilities and develop project concepts though a Foundation – Park Working Group. As a result, a comprehensive green house gas inventory was completed for the park, and potential stewardship projects were identified. Currently, Yellowstone National Park, in partnership with the Yellowstone Park Foundation, has launched the *Yellowstone Environmental Stewardship Initiative*. This initiative will dramatically improve the park's environmental performance with a focus on significant reduction in greenhouse gas emissions.

- In 2007, Yellowstone National Park achieved a 75.2% diversion rate from the landfill. This was accomplished through the following successes:
  - 1. West Yellowstone Compost Facility: This facility accepted over 2000 tons of waste in 2007 and produced approximately 1400 tons of compost.
  - 2. <u>Recycling:</u> In 2007, 610 tons were recycled, including 278 tons of cardboard, 89 tons of paper, 30 tons of Aluminum/steel, 174 tons of glass, and 39 tons of plastics.
- <u>Alternative Fuels:</u> In 2007, Yellowstone National Park burned 204,451 gallons of ethanol blended unleaded fuel and 148,674 gallons of bio-diesel blended fuel. Through calculations verified by the Montana Department of Environmental Quality, the park, by using these alternative fuels, reduced carbon dioxide emissions into the atmosphere by 522 metric tons in 2007.
- <u>Hybrid Vehicles</u>: By the end of 2007, these three vehicles logged a total of more than 136,845 miles, averaged more than 50 miles per gallon and made thousands of visitor contacts. Additionally, Yellowstone NP accepted six more hybrid vehicles from Toyota.
- Employee Ride-Share Program: Approximately 45 employees participate in a Ride-Share Program that helps reduce fuel consumption, improve safety by decreasing traffic on roads, and ease parking constraints in the park. During 2007, the bus logged more than 10,000 miles transporting employees to and from the workplace. The bus is fueled with bio-diesel.
- <u>Green Cleaning Products</u>: In 2007, the park purchased more than 700 gallons of environmentally preferable products.
- Renewable Energy: During the summer of 2007, a generator operating on 100% vegetable oil was demonstrated at Lamar with great success. The Lewis Lake Visitor Contact Station and ranger residence continues to use solar energy, reducing the need for a propane generator.

<u>Yellowstone's EMP team</u>: The team is comprised of ten NPS employees that have been selected due to their sincere desire to promote sound sustainability initiatives. One of the guiding mechanisms for the team is an employee survey that is conducted periodically. In April 2007, the survey was conducted by

the Environmental Protection Agency. The findings of this audit have been reviewed by the EMP team and are being incorporated into future planning.

#### Roads

- The park road crew did a five mile cold-in-place recycle of a 5 mile section of road in the Tower Junction area. Park crews also chip-sealed 10 miles of primary road in the Tower area as well as 6 miles from Grizzly Creek to Norris. In addition, the road crew completed a 2.5 miles thin lift maintenance asphalt overlay from Upper Terraces in Mammoth to Golden Gate.
- The road crew also hauled over 2500 tons of contaminated soils from Yellowstone National Park to the Cody Landfill in Cody, Wyoming.

### Federal Lands Highway Program

- Canyon South Rim Drive/Artist Point/Camper Services Landscape architects involved in all aspects of construction, as NPS liaisons with Western Federal Lands Highway Division (WFLHD) engineers. Artist Point was rehabilitated and the parking area reconstructed to address traffic and vehicular flow, erosion and drainage. Sixty-two basketed trees and over 400 potted plants went in the ground and 42 pounds of native grass/forb seed was distributed. Ten aluminum and five wood signs were provided to contractor.
- <u>Madison-Norris, Phase B</u> Design collaboration continued with WFLHD and YNP Road Team on bridge design and the Gibbon Canyon riparian and upland restoration plan.
- <u>Sylvan Pass-East Entrance</u> 100+ pounds of native collected seed were spread over fills, dig outs, ditches and road cuts. Over 1200 potted native plants were planted throughout the site. Numerous shrubs/trees were planted in the designed grizzly bear travel corridors.
- <u>Dunraven Pass</u> Documented revegetation success of previous year's planting, for mitigation purposes, of 3,000 bare root whitebark pines, *Pinus albicaulis*.
- <u>Beartooth Highway, Segment 1</u> Work continued from the NE Entrance to Cooke City with input from landscape architect.

In addition, the Landscape Architects were involved in the following:

- <u>Stephens Creek Nursery</u> Propagated 2092 potted grasses, forbs and shrubs for future use on East Entrance road, Canyon VEC and Artist Point, West Entrance station, Mammoth and other areas. Rooted 184 willow cuttings for East. Transplanted 83 small Douglas fir trees at the nursery for future use in Mammoth area. Planted tree spade trees at Canyon Ranger Station, Mammoth, and OF Lower General Store.
- Numerous plaques, arrowheads, MUTCD, custom baked aluminum, hand routed wood and computer engraved aluminum, signs left the shop. Constructed wood signs for Artist Point and started large entrance sign for West Entrance.

### Asset Management

Yellowstone's Maintenance Division with the assistance of Booz, Allen, Hamilton formulated a Park Asset Management Plan (PAMP) and presented it to the management team in April. The major goal of the PAMP is to articulate how Yellowstone currently maintains its assets as well as its future management plans. This is accomplished through a review of how the park prioritizes its assets, bundles work orders into logical projects, estimates operating and maintenance (O&M) requirements, demonstrates funding gaps, and identifies techniques to manage these funding gaps. The PAMP also provides the park with a detailed executable work plan to use as a guide for their day-to-day work management decisions.

During the summer season, a four person condition assessment team inventoried and performed a comprehensive condition assessment on the remaining 30% of the park's paved roads. The Federal Highways Administration (FHWA) performed a comprehensive condition assessment on all of the park's retaining walls along the roads. Retaining wall equipment/feature records were created in FMSS. Specification templates were completed and deficiencies costed. FHWA also began a comprehensive condition assessment of the pavement, which will be completed in the fall of 2008.

The park continues to perform quality assurance/quality control on the FMSS data. All facility-related PMIS projects are formulated and tracked in FMSS. The maintenance division and the GIS lab are creating maps of all the water and wastewater systems in the developed areas. These maps are being reviewed and continually updated by the local utility system operators.

# **Building Projects**

Major on-going contracted construction projects included:

- Construction of the Mammoth Justice Center began in May, 2007
- Reroofing of the Old Faithful Inn
- Construction of the West Entrance Station began in Summer 2007
- Construction of the West Contact Station at the West Yellowstone Chamber of Commerce began in Summer 2007
- Construction of a new housing four-plex at South Entrance completed in Fall, 2007



# Craft Shops accomplishments are as follows:

- o The "Old" Old Faithful VC was abated of all asbestos, disassembled, and demolished over the 2006-2007 winter season.
- o Completed the construction of a new Ranger Station in the Canyon District.
- o Repaired the underground fire suppression line and system at the Old Faithful Inn.
- o Installed a new underground Propane tank for the Lake 4- plex.
- o Repaired / replaced many of the inoperable fire hydrants throughout Lake and Fishing Bridge.
- o Painted the exteriors of 15 structures in Mammoth and the interiors of the YACC dorms.
- o "Turned over" 13 quarters during 2007.
- o Installed new wood shingle roofs on 3 quarters in the Mammoth Area.
- o Repaired the back porches on two historic quarters in Mammoth --#32 and #33
- o Replaced the roof on the lift station at Brink of the Upper Falls at Canyon.
- o Installed new custom made exterior lights at the Heritage Center.
- o Completed the installation of one boiler in the new Canyon Visitor Center.
- o Renovated the interior of Building # 38 for the Concessions Management Office's needs. In addition, completed interior renovations of the Canteen, Quarters # 4 for Interpretation, and rehabbed the conference room in the Garage # 508.
- Moved and setup new temporary restroom facilities at the West Yellowstone Contact building, prior to contract construction. This involved installing electrical and water and sewer services, as well as construction of a handicap accessible steps ream and decking.
- o Installed new sidewalks at the Albright Visitor Center and Chittenden House.
- o Grant Visitor Center was reframed, and reroofing with metal was begun.

# Resources Stewardship

### **Budget and Personnel**

The Yellowstone Center for Resources (YCR) was allocated a FY2007 base operating budget of \$4,348,000 with a staff of 67.56 full-time-equivalent employees. The base allocation was 65% of the total YCR budget for FY07. Additional monies came from Recreation Fee Demonstration funds, the Fishing Fee program, the Federal Lands Highway Program, the Special Emphasis Program Allocation System, private sources, other National Park Service (NPS) funds, and other federal funds. Forty-four assistance agreements and task orders were processed in FY07, for approximately \$1,478,000 in total agreements activity.

## Natural Resources

### Air Quality

The NPS Air Quality Division's 2006 Annual Performance and Progress Report noted that no measured Clean Air Act standards were exceeded in Yellowstone during the period 1996–2005 for which data were presented, but there had been a statistically significant increase in ammonium in precipitation, which can be of concern because of the potential ecological effects (e.g., acidification of surface waters and nutrient enrichment that disrupts natural systems). YCR staff continues to work with the Environmental Protection Agency and air quality agencies to better understand the possible causes and effects of the increased ammonium (e.g., oil and gas development, coal-fired power plants, and agricultural production) and of nitrogen loading.

As measured in carbon monoxide (CO) concentrations and particulate matter, winter air quality at the West Entrance and Old Faithful has been stable or improving since 2003. The highest hourly CO concentrations at both locations occur during the winter even though summer traffic volumes are nearly 60 times higher, but the combination of reduced emissions by snowmobiles meeting the Best Available Technology (BAT) requirement and fewer winter vehicles entering the park has greatly reduced CO concentrations.

A web cam was set up at the Old Faithful Air Quality monitoring station to take a photo every 15 minutes and show the current and preceding day's hourly carbon monoxide concentrations, particulate matter levels, and weather conditions. The camera and archived pictures are used to correlate the air quality data with traffic patterns and to check instrument operations.

# Geology

The focus of the park's geology program is protection and monitoring of Yellowstone's geothermal features. This is done primarily through a compact with the state of Montana that limits groundwater withdrawal in a designated area north and west of the park, the acquisition of airborne thermal infrared imagery through CESUs with the University of Montana and Utah State University, and the Yellowstone Volcano Observatory, a partnership with the U.S. Geological Survey and the University of Utah that monitors volcano and earthquake hazards within the park using a network of 26 seismic and 13 GPS leveling stations.

# Vegetation

The vascular plant flora of Yellowstone is comprised of 1,350 species. Park staff have met the servicewide inventory and monitoring goal of documenting at least 90% of the park's vascular plant species and incorporating the information into the NPSpecies biodiversity database, , which now includes approximately 9,000 specimens in the park's herbarium.

Inventory and monitoring. Plant surveys conducted to meet compliance requirements during 2007 documented 131 additional sites for the GIS layer of plants on Wyoming "species of special concern" list and plants that are rare in the park. Summer fieldwork for Federal Highways projects took place primarily in the Old Faithful area, where 378 sites containing rare species have now been documented. Three non-native species were documented in the park for the first time: Jerusalem oak, perennial pepperweed, and dwarf nettle. Unlike the many non-native plant species that have become well established in the park, these relatively small populations are likely to be successfully eradicated. With funding provided by Canon U.S.A., Inc. through the Yellowstone Park Foundation, a two-year survey to compile a comprehensive bryophyte species list for the park located a small population of Buxbaumia aphylla, an unusual moss that had not been identified in the park since 1951.

Insect infestations. An aerial survey of the park conducted during 2007 with the help of U.S. Forest Service mappers confirmed that the insect-caused mortality of overstory trees that erupted early in the decade continues (Table X). Pockets of red-needled trees are evident throughout the park. The cause of the mortality is primarily native bark beetles. Although both Douglas-fir beetle and Engelmann spruce beetle activity have declined since 2000, partly because Engelmann spruce beetles have killed almost all of their preferred food source (spruce trees more than 10 inches), mountain pine beetle activity in high-elevation whitebark pine forests remains at epidemic levels, affecting some 25% of the area occupied by mature whitebark pine stands in the park. Landscape-scale drought and the availability of suitable host trees are the primary forces in the initiation and persistence of insect outbreaks. Healthy trees can successfully defend themselves from beetle attack by "pitching out" adult females as they try to bore their way into the tree.

An effort to determine what, if any, influence insect infestations may have on landscape-level fire patterns and vice versa continued in 2007 through Rocky Mountain and Great Lakes Cooperative Ecosystem Studies Units agreements between the park and three researchers: Dr. Dan Tinker (University of Wyoming), Dr. Monica Turner (University of Wisconsin–Madison), and Dr. William Romme (Colorado State University).

*Other research.* The controversies surrounding the status of woody vegetation on the northern range (aspen, willow, and cottonwood) as it has been affected by changing elk population levels and wolf reintroduction, continues to generate research interest, including a two-year study of temperature influences on willow growth and phenolic production in areas with varying wolf and elk densities throughout Greater Yellowstone by Dr. Don Despain (U.S. Geological Survey, retired) and Dr. Rex Cates (Brigham Young University).

### Aquatic Resources

The two main priorities of the park's Fisheries Program are the preservation of cutthroat trout in Yellowstone Lake, which has the largest remaining concentration of genetically pure inland cutthroat trout in the world, and restoration of fluvial populations of native trout, many of which have been lost because of non-native species introductions.

Yellowstone cutthroat trout preservation. The park's Yellowstone cutthroat trout (YCT) faces three threats: non-native lake trout, the parasite that causes whirling disease, and the effects of a continued drought. Because of the relatively limited distribution of whirling disease, most of the YCT loss has been attributed to lake trout predation and continued drought conditions. The persistent drought has reduced available habitat and disconnected tributaries from Yellowstone Lake, especially during late summer and fall, when fry are typically attempting to move to the lake.

More than 74,000 lake trout were removed from Yellowstone Lake in 2007, and more than 270,000 since 1994, saving hundreds of thousands of YCT from predation. Almost half (46%) of the lake trout removed through control netting were caught in the smallest commonly used mesh size (25-mm), indicating that lake trout spawning remains strong but the removal effort has kept age structure of the lake trout population dominated by immature fish. The number of upstream-migrating YCT counted at Clear Creek, one of the largest spawning tributaries, was 538 during 2007, not much higher than the 2006 count of 489 and far below the 2002 count of 6,613. Historically, Clear Creek supported more than 30,000 spawners, but those numbers have not been seen since the mid-1990s.

Westslope cutthroat trout. Only two populations of genetically pure Westslope cutthroat trout (WCT) are known to exist in the park. After checking the efficacy of the 2006 piscicide treatments to remove the introduced YCT from the 7.1 acre High Lake, more than 1,300 WCT eggs were placed in incubators there in June and July 2007. In mid-July, 1,150 juvenile and adult WCT were transported by helicopter from Geode Creek to High Lake. Subsequent observation of abundant fry near the incubators and healthy WCT in the lake indicated the initial success of these restocking efforts, which are expected to be repeated through 2009.

An important component of the WCT restoration program is to determine any long-term effects that the use of pesticides may have on non-target organisms. One year after the rotenone treatment in High Lake, invertebrate surveys indicated recovery of invertebrate populations within the High Lake outlet stream, while those in the inlet stream remained similar to conditions immediately after treatment.

Although the rotenone was lethal to larval, gill-breathing amphibians, juveniles and adults appeared unaffected.

Drought fishing restrictions. Because trout that would be capable of revival after being caught and released in cold water are more likely to die when caught in warm water, additional restrictions have been placed on angling during three of the past six years (2002, 2003, and 2007). On July 6, with temperatures exceeding 25°C on the Gibbon and Firehole rivers, the park issued a Fishing Advisory asking for voluntary cooperation in refraining from fishing between noon and 6 PM on several priority waters. That same day, hundreds of dead brown and rainbow trout were found along the Firehole River and in Nez Perce Creek; three days later evidence of a large die-off of longnose dace, longnose suckers, and redside shiners was found on Pelican Creek. When the hot and dry conditions continued, the park announced mandatory restrictions on July 21 that limited fishing on priority waters to 5:00 AM to 2:00 PM. By late July the flows within the park, particularly those across the Yellowstone River drainage, had declined to a fraction of their normal levels. On August 22, with daily peak temperatures rapidly declining, the fishing restrictions were lifted.

Water quality. Long-term water quality monitoring of Yellowstone National Park's major surface waters is done by Fisheries and Aquatic Sciences Section staff in cooperation with the Greater Yellowstone Network's Inventory and Monitoring Program. Surface water is monitored monthly at 12 sites on major rivers year-round and monthly during the ice-free period from May to October at seven sites on Yellowstone Lake. Dissolved and total metals in the water and sediments are measured during high and low flow periods in Soda Butte Creek. As is typical of mountain streams with minimal sediment contribution, water clarity usually remains very good throughout the year, with more turbid conditions observed during snowmelt and after rainfall events. However, the state of Montana has listed the water quality of Soda Butte Creek upstream of the park's Northeast Entrance as "impaired" because of elevated metal concentrations from the McClaren mine tailings located near Cooke City and within the Soda Butte Creek floodplain. Sampling at the park boundary in 2007 found that levels of total and dissolved arsenic, copper, selenium, and iron in the water were below detection limits, total iron concentration did not exceed the state's aquatic-life standards, and arsenic and selenium in the sediment were below detection limits.

#### Bears

Delisting of grizzly bears. In April 2007, the U.S. Fish and Wildlife Service (USFWS) announced that the Greater Yellowstone Ecosystem (GYE) grizzly bear population segment had recovered sufficient numbers and distribution to be removed from threatened status under the Endangered Species Act. However, the potential for conflicts when the need or opportunity arises for a grizzly bear to obtain human food will make the presence of a viable grizzly population in Greater Yellowstone a continuing challenge for land managers and property owners.

The government agencies with jurisdiction over GYE grizzly bears have approved a conservation strategy for managing them as a recovered population within the Primary Conservation Area (PCA) and adjacent areas with adequate habitat and acceptable risk of human-caused mortality. The USFWS has approved the plans developed by Idaho, Montana, and Wyoming for grizzly bear management outside the PCA, where more consideration is given to human use. The Interagency Grizzly Bear Study Team, which has members from the U.S. Geological Survey, the USFWS, the National Park Service, the U.S. Forest Service, and the states of Idaho, Montana, and Wyoming, will continue to monitor population numbers, distribution, habitat use, reproduction, and mortality. About 15% of GYE grizzly bears are radio-collared.

Grizzly bear management in YNP has not changed significantly as a result of delisting. Park staff continues to protect bear habitat and emphasize prevention of bear-caused property damages, bear-

inflicted human injuries, and human-caused bear mortalities through public education, sanitation, storage of human foods and garbage in a bear-proof manner, and enforcement of bear management food and garbage storage regulations.

*Grizzly monitoring.* At least 14 females with home ranges wholly or partially within the park produced litters with a total of at least 33 cubs in 2007 (Figure 2). With seven litters of triplets and only two single cub litters, the average size of the observed litters was 2.4. The number of females producing cubs each year appears to have stabilized, suggesting that the park may be at or near carrying capacity for grizzly bears.

*Bear-human conflicts.* Bear-human conflicts are defined as incidents in which bears damage property, obtain human foods, or injure people. In 2007, there were 20 reported bear-human conflicts, 8 involving grizzly bears, 6 with black bears, and 6 with bears of unidentified species. This compares to an average of 11.3 conflicts a year during 1994–2006. In 13 of the 2007 incidents, property damage occurred, but no food was obtained; in 5 incidents, food was obtained. The other two incidents resulted in human injury: a man taking photographs alone in the Hayden Valley backcountry in May was severely wounded by a grizzly sow with a cub, and a park employee participating in a carcass study for the wolf project with a partner received minor injuries from a black bear that bit her in July. Bear-inflicted injuries during 1994–2006 averaged 1.5 per year. The last bear-caused human fatality in Yellowstone occurred in 1986.

One bear had to be removed from the park in 2007. A three-year-old female grizzly that had been involved in multiple instances of property damage at Lake, obtained some food, become habituated to people, and returned twice to Lake after having been relocated was trapped at Fishing Bridge on August 20 and driven to the Washington State University Bear Research, Education, and Conservation Program. The bear management program in Yellowstone has assisted with and benefited from the non-invasive ecology, nutrition, and physiology studies on bears performed at this facility for more than 20 years.

### **Ungulates**

**Bison.** Park staff participated for the seventh year in the Interagency Bison Management Plan with the Animal and Plant Health Inspection Service and the U.S. Forest Service of the U.S. Department of Agriculture and the state of Montana. The plan is designed to manage the risk of brucellosis transmission from bison to cattle, conserve the bison population, and allow for gradually increased tolerance of bison outside the park on national forest land. After a drop in the late summer population to approximately 3,900 in 2006, relatively mild weather reduced migration from the park during the following winter. In the hunt conducted by the state of Montana, 59 bison were killed outside the park. Outside the west boundary, the Montana Department of Livestock sent four bison to slaughter and 57 bison captured in June to the Stephens Creek facility near the north boundary where they were held briefly before release into the park. The late summer population was estimated to be 4,700 based on aerial surveys conducted in July and August 2007.

*Elk.* The Northern Yellowstone Cooperative Wildlife Working Group, which includes park staff along with representatives from Montana Fish, Wildlife and Parks, the U.S. Forest Service, and the U.S. Geological Survey-Northern Rocky Mountain Science Center, conducted its annual survey of the northern Yellowstone elk population. The winter count, which was approximately 17,000 in 1995, has been approximately 6,700 elk during 2002–2007. The decline has been attributed to predation by reintroduced wolves, a growing bear population, hunter harvest, and possibly drought-related effects on pregnancy and survival. The state of Montana has reduced the number of antlerless permits issued in recent years so that hunting has little impact on population size.

**Pronghorn.** There have been serious concerns about the long-term viability of Yellowstone pronghorn since a decrease in counts from 536 to 235 pronghorn during 1992–1995. Causes of this rapid decrease remain unclear, but fawn survival has remained low due to coyote predation. Development of private lands outside the park has reduced available winter range to a relatively small, isolated area. Much of the current pronghorn winter range in the park is former agricultural land infested with exotic vegetation of low nutritional quality. The pronghorn count, which remained relatively constant during 1996–2006 at approximately 196–235, reached 291 in 2007, the highest since 1993.

#### Wolves

**Population monitoring.** At the end of 2007, at least 171 wolves were using territories that lay primarily within the park, a 26% increase over the 2006 count and close to the 2003 population peak of 174. Wolf distribution across the park continued to remain largely unchanged, indicating that all available wolf habitat is being used. The number of packs dropped from 13 to 11 during 2007, but the average pack size increased from to 14.2, and there were more wolves that did not belong to packs, including a radio-collared wolf that dispersed into the park from the Steel Mountain pack in Idaho.

At year's end, 57 (33%) of the wolves in the park wore radio collars, including 22 that had been darted from a helicopter and collared during 2007. The primary cause of mortality continued to be intraspecific strife. It was responsible for four of the six deaths of collared wolves; one collared wolf died as a result of a vehicular collision, the cause of the other's death is unknown. The deaths of six uncollared wolves were attributed to intraspecific strife (3), old age (2), and vehicular collision (1).

**Denning.** Of the 11 packs that produced pups, three had multiple litters. Temporary closures were instituted around den sites after the birth of litters in four packs. However a Hayden Valley den site was visible from across the Yellowstone River, where hundreds of people observed the wolves. Possibly because of this frequent contact, the Hayden Valley pack has become the most human-tolerant in the park, which is cause for concern for both the wolves' and human welfare.

*Prey composition*. Including definite, probable, and possible kills, Wolf Project staff documented a total of 323 kills in 2007, including 272 elk (84%), 11 bison (3.4%), 7 wolves (2%), 4 deer, 4 coyotes, 3 moose, 2 black bears, 1 pronghorn, 1 golden eagle, 1 red fox, 1 otter, and 16 unknown prey (5%). The composition of elk kills was 41% bulls, 21% calves (0−12 months), 16% cows (1−9 years old), 12% old cows (≥10 years old), and 10% elk of unknown sex and/or age. Bison kills included 6 calves (unknown sex), 3 bulls, and 2 adults of unknown sex.

Genetics. A collaborative effort with the canid genetics lab at the University of California at Los Angeles led to publication of the first study on Yellowstone wolf genetics in the journal *Molecular Ecology*. Analysis of DNA samples collected from hundreds of wolves in Yellowstone since reintroduction in 1995 found that the population had maintained high levels of genetic variation and low levels of inbreeding. A larger scale analysis will address issues of population connectivity and migratory exchange among the three Rocky Mountain recovery areas and the importance this has for genetic diversity and long-term population sustainability.

*Disease.* Serology results from wolves captured during 2006 and 2007 indicate that most of the adult wolves handled in 2006 and 2007 had been exposed to canine distemper virus (CDV), probably as a result of living through the 2005 outbreak in Yellowstone. However, pups handled during the same time exhibited very low levels of exposure, suggesting that the virus had been largely cleared from the park by the summer of 2006.

# Other Wildlife Issues

*Bald eagles.* The U.S. Fish and Wildlife Service removed the bald eagle from the list of threatened species in August 2007. In Yellowstone, where 13 pairs produced 13 fledglings in 1987, 34 pairs produced 26 fledglings in 2007. The trend suggests that the park population may not yet have reached carrying capacity and may increase further in the future.

**Peregrine falcons.** The peregrine falcon density in Yellowstone continues to be as high as anywhere in the Northern Rockies. One new eyrie was found in 2007, bringing the total number of eyries in the park to 32, from which 47 young fledged, the fourth highest number since records began 25 years ago.

*Trumpeter swans.* The park's resident trumpeter swan count was only 14 in 2006, the lowest since the 1930s, and declined further to 7 adults and no young in 2007. This was the first time in 26 years of trumpeter swan surveys that none were found in the Bechler area. Plans are underway for a conservation assessment workshop to be held at the park to identify threats to the persistence of the Yellowstone trumpeter swan and mitigation strategies that could prevent its local extirpation.

Beavers. Although little is known about beaver density and distribution in Yellowstone prior to the late 1980s, current data indicate that the park now has a sustainable population. Some of the approximately 50 beavers that were reintroduced to several Gallatin National Forest drainages by the U.S. Forest Service in the mid-1990s moved downstream into the park, hastening repopulation on the park's northern range, which has experienced a resurgence of willow. The number of active beaver colonies found in a bi-annual survey increased from 49 in 1996 to 85 in 2003. Most of the 127 colonies found in a parkwide aerial census in 2007 were concentrated in three general areas; all were found in willow communities and none were cutting aspen.

Wolverines. The wolverine has become a species of concern in the Rocky Mountains because of its low population density, infrequent reproduction, genetic fragmentation, and possible sensitivity to human disturbance. With the continued support of the Yellowstone Park Foundation, the Absaroka-Beartooth Wolverine Project completed its second winter season of efforts to document information about the species in the eastern half of Greater Yellowstone. Participating in this project with Yellowstone National Park are the U.S. Forest Service; the Rocky Mountain Research Station of the U.S. Department of Agriculture; Montana Fish, Wildlife and Parks; the Wyoming Game and Fish Department, and the Rocky Mountain CESU. A team of eight technicians and six volunteers baited and monitored 32 traps for 2,715 trap nights. They captured two wolverines north of the park and fitted them with a VHF transmitter and GPS collar. One of the two wolverines captured in 2006 was legally taken by a Montana trapper in February 2007; the other one shed his GPS collar but still has a functional VHF transmitter. A second goal of the project is to foster support for wolverine conservation through public education. Two wolverine study day camps were held in Yellowstone gateway communities during the summer in cooperation with the park's Division of Interpretation.

Wildlife Health. Disease has become a critical factor in the long-term survival or sustainability of desired population levels for many wildlife species. Deer, elk, and moose in the park are at moderate risk for infection by chronic wasting disease which is transmitted by animal-to-animal contact and through the environment. It has spread across Wyoming toward the park, with infected cervids having been found approximately 130 miles away. In 2006, the NPS signed a Memorandum of Understanding with Montana State University (MSU) and the Wildlife Health Center in the School of Veterinary Medicine at the University of California, Davis, to establish a long-term collaborative program to address wildlife disease problems in Yellowstone. In August 2007, park staff held a workshop at which the U.S. Geological Survey's National Wildlife Health Center provided training on how to expand surveillance for CWD and, if necessary, implement management actions that will reduce or stabilize its prevalence in deer and elk.

In October, a multidisciplinary team met in Davis, California to develop a plan to tackle brucellosis issues in the park. This meeting catalyzed UC Davis, in collaboration with experts and institutions from across the country, to put forward major proposals to the United States Department of Agriculture and the National Science Foundation for grant funding consideration. Park staff initiated a pilot study with MSU to evaluate the bison immune system and understand how nutritional condition affects the bison's defense against brucellosis infection.

# Cultural Resources Archeology

With the help of a very capable group of volunteers, the park archeologist completed two archeological inventory reports covering the area along the Yellowstone River between Fishing Bridge and Gardiner, and a third report on the south bank of the Madison River were completed. Archeological sites near populated areas seem to be subject to unauthorized artifact collection as they contain fewer tools than are expected.

In preparation for road reconstruction, shovel tests and test excavations were conducted at two sites. More than 11 additional historic sites were recorded during a survey of approximately 700 acres within the primary and secondary road corridors in the Old Faithful area.

The first field school of the Montana-Yellowstone Archeological Project, a collaboration between the University of Montana and the park, provided training for 11 university students in the first year of a two-year survey of 700 acres of park land that are being considered for a native plant restoration effort. This year's primary objective was met when the location of the former Cinnabar railroad station, the train stop used by park visitors from 1883 until 1903, was verified. The team excavated the corner of the foundation, the entry way to another building, and unearthed artifacts including a Northern Pacific rail sign, revolver bullets, newspaper fragments, and the sole of a cowboy boot. Five hearths that were eroding out of the banks of the Yellowstone River downstream of Cinnabar were salvaged and a radiocarbon date of 1670 B.P. was obtained.

### **Ethnography**

Ethnographic Resources Inventory. Yellowstone is a pilot program site for the ERI, an NPS database of information about natural and cultural resources that have been identified by park-associated tribes as having continuing significance based on the tribe's historical associations with the park. In 2007 funding provided by the Greater Yellowstone Coordinating Committee (GYCC) was used to contract research on the significance of the GYCC's priority resources to seven tribes who have been named in U.S. treaties as having aboriginal association with Greater Yellowstone Area (the Blackfeet, the Crow, the Eastern Shoshone, the Gros Ventre, the Nez Perce, the Salish, and the Shoshone-Bannock). The GYCC priority resources include watersheds, aquatic ecosystems, whitebark pine, cutthroat trout, and species that are considered threatened or endangered (trumpeter swans, wolverines, bears, moose, lynx, and eagles). Information was gleaned from ethnographies conducted by nineteenth and twentieth century anthropologists while working among the seven tribes. Yellowstone's ERI database currently contains 1,073 resource entries that include an explanation of the resource's tribal uses and significance that can be drawn on by any Greater Yellowstone jurisdiction to inform environmental planning, resource management, and public education.

*Nez Perce Trail.* The 1,170-mile route taken by the Nez Perce as they fled from the U.S. Army toward Canada in 1877, now designated the Nez Perce National Historic Trail (NPNHT), includes a segment in

Yellowstone National Park. With funding from the NPNHT Administration of the USDA Forest Service, the Ethnography Program hired a University of Montana graduate student in cultural anthropology to enter what is known about the Yellowstone segment of the trail—including oral histories, historical documents, other archival finds, and information from last year's National Endowment for Humanities scholars' meeting—into a database that is already being used by park interpreters and will be used to create materials for the park's website and the roadside exhibit near Nez Perce Creek

# Park History

*Historic Roads.* The final inspection of the Sylvan Pass to East Entrance reconstructed road segment was conducted by the NPS, the FHWA, and H-K Contractors, Inc. in October 2007. H-K Contractors, which has completed several other road reconstruction projects in the park, said that this was the most difficult and nerve-wracking. The terrain is some of the steepest in the park, and forest fires and landslides closed the road intermittently during two construction seasons, caused smoky working conditions, and resulted in the loss of a major historic culvert, requiring additional effort and expense to replace it as quickly and aesthetically as possible. The problems at the Sylvan Pass material extraction area, grizzly bear issues, mud snails, and whirling disease caused further complications.

A geotechnical survey was conducted along the Madison to Norris road to evaluate the extent and nature of the extensive repairs that will be needed to stabilize the historic masonry walls in the Gibbon Falls area. Archival research was conducted to better understand the process of constructing the wooden Beryl Springs Bridge over a thermally active area after damage to the road from the 1959 earthquake. The bridge was documented and a request for concurrence with the NPS's determination of National Register eligibility was sent to the Wyoming State Historic Preservation Officer.

Historic Structures. With the help of the regional coordinator of the List of Classified Structures (LCS) Program and his staff, the park historic architect surveyed the NPS and concession buildings in the Roosevelt Historic District and the Lake area for the first time since 2002. The number of buildings in the Lake area in poor condition had been reduced significantly, primarily because of work completed on guest cabins at Lake Hotel and Lake Lodge. The LCS active database now includes 953 buildings, roads and bridges, utility structures, grave markers, and other constructed features in Yellowstone.

The Tauck World Discovery Guest Volunteer Program, now in its fifth year of operation, had groups working in the Norris area. Al Williams, a master craftsman from the Western Center for Historic Preservation in Grand Teton National Park, came to supervise the Michigan Volunteers Corp in their major repairs to the Norris Bookstore. They completed the work flawlessly and without injuries to anyone in about eight days for slightly less than \$8,000, demonstrating that the right combination of non-profit organizations, NPS personnel, enthusiastic and energetic volunteers, and historic preservation-oriented contractors can produce proficient and economical results. An Elderhostel group stained the building after the construction work was completed.

Yellowstone Heritage and Research Center. In conjunction with park planning efforts, park staff researched and wrote histories of the Fishing Bridge peninsula, which will help guide the road reconstruction design and facilitate public understanding of the importance of the park's road system, the Lake Area for the Lake Charette, the Haynes Picture Shop, the West Entrance road, and the Fort Yellowstone Jail.

As part of a three-day workshop on "Telling Lives, Teaching Lives: America Between the World Wars," HRC staff assisted 25 teachers from Bozeman with conducting research in the photograph collection, archives and research library. HRC staff also hosted Elderhostel Service Programs for the first time in 2007. Arranged through the University of Montana–Western, two sessions were held, in February and

May, each with 25 participants who provided a total of almost 1,200 hours of volunteer assistance on inventories, separating maps, rehousing archival items and library vertical files, making new labels, and cleaning the historic vehicle collection.

The major preventive conservation project in 2007 involved the cleaning of approximately 20 wolf skulls and extracting teeth from certain skulls needed by researchers with the Wolf Project. Some of the skulls were from the wolves relocated to the park in 1995 and 1996 and their offspring.

The bookmobile system set up by the librarians in 2006 to give more park volunteers and NPS and Yellowstone Association employees in the park's interior access to a lending library and other library services was expanded to three additional stops within the park and began earlier in the year.

Through the generosity of donors to the Yellowstone Association and Yellowstone Park Foundation, HRC staff was able to obtain additional flat file cabinets for the proper storage of the large archives and library map collections, as well as a special cabinet and wall-mounted cantilevered rack to store oversized rolled maps and documents.

# Professional Support Research Permitting

During 2007, Yellowstone's Research Permit Office issued 195 research permits to scientists from 35 U.S. states and 7 foreign countries. This was the first time in several years that the number of permits dropped below 200. Several scientists contacted the park and requested that we put their permits on hold for one year, due to lack of research funding. An additional 22 scientists inquired about conducting research in Yellowstone, but did not pursue obtaining a permit. The issued permits included 32 new projects that had been approved by Yellowstone's Research Review Team as well as renewal permits for ongoing studies. Microbiology continues to be the most popular field for research, accounting for 25% of all permits; geology and geochemistry remains second (20%). Twenty-one investigators reported the conclusion of their studies and submitted their research findings and publications to the park.

# NPS Servicewide Benefits-Sharing EIS

The draft Environmental Impact Statement released to the public in September 2006 examined whether the NPS should share in the potential scientific and economic benefits when researchers studying park resources discover or invent something commercially valuable from their research. The Preferred Alternative would require researchers who study park specimens to enter into benefits-sharing agreements with the NPS before using their research results for any commercial purpose. Engaging park researchers in benefits-sharing agreements could return scientific benefits, in-kind services, and sometimes royalties and other monetary benefits to parks for conservation-related purposes. A 130-day public review of the draft concluded in early 2007. A final EIS was ready for internal review in December 2007. When legal clearances are received from the Department of the Interior Solicitor's Office and Washington-level reviews are completed, the EIS process will conclude with release of the final EIS and its decision document.

# Resource Information

In its fifteenth year of publication, *Yellowstone Science* presented information on many aspects of the park's natural and cultural resources for nearly 2,600 subscribing individuals and institutions. In addition to an issue devoted to wildlife diseases and health initiatives in Greater Yellowstone, topics included proteins that can effectively operate in the park's geothermal areas, park visitors' preferences regarding backcountry experiences, and Theodore Roosevelt's 1903 camping trip in the park.

The Greater Yellowstone Science Learning Center (GYSLC) which receives support from the Yellowstone Park Foundation and Canon U.S.A., Inc., has been adopted as the servicewide website model for NPS Research Learning Centers and Inventory and Monitoring Networks. Its primary purpose is to explain the need for and results of research in the Greater Yellowstone Inventory and Monitoring Network. During 2007, resource information staff developed content for 20 additional topics for the website and updated information on existing topics.

In recognition of the 20<sup>th</sup> anniversary of the Yellowstone 1988 fires, resource information staff is collaborating with the International Association of Wildland Fire (IAWF) to produce the Eighth Biennial Scientific Conference on the Greater Yellowstone Ecosystem, to be held in Jackson Hole, Wyoming, on September 22–27, 2008.

## Resources and Visitor Protection

### Budget

	FY05	FY06	FY07
ONPS	\$6,978,900	\$6,856,200	\$6,870,600
Special Use	371,788	360,244	358,771
SEPAS	73,164	92,425	234,200
Proceeds from Sales	1,937	12,333	2,708
Reimbursable Accts	220,365	332,938	394,076
Fee Collection	1,302,300	1,379,400	1,420,566
Fee Demo	128,500	292,700	234,200
Donations	194,980	205,014	269,978
Restitution	-	23,024	27,982
Federal Hwy	172,000	150,000	120,000
FIREPRO	1,417,274	1,097,501	1,132,312
TOTAL	\$10,861,208	10,801,779	11,065,393

### Visitor Services Office

Beginning January 1, 2007, a new pass series was implemented; *America the Beautiful - The National Parks and Federal Recreational Lands Pass Program*. This program replaced the Golden Eagle, Golden Age, and Golden Access and National Park Passes. The new pass series includes an \$80 annual pass, \$10 Senior Pass and non-fee Access Pass; the Yellowstone and Grand Teton Park Pass was \$50. Entrance

fees were \$25 per vehicle/7 days. Campground fees continued at the same price \$12 or \$14 a night depending on amenities at the campground.

### Park Visitation—2007 Sets New Record

Visitation to the park was on a record-breaking pace throughout the year—culminating with an all-time annual recreation visitation high of 3,151,342 visits, up 9.8 percent from last year. The previous record was set in 1992 at 3,144,405 visitors.

North	566,467
West	1,291,055
South	729,569
East	363,877
Northeast	200,374
New Record Visitation!	3,151,342

Beginning January 1, 2007, a new pass series was implemented; *America the Beautiful - The National Parks and Federal Recreational Lands Pass Program*. This program replaced the Golden Eagle, Golden Age, and Golden Access and National Park Passes. The new pass series includes an \$80 annual pass, \$10 Senior Pass and non-fee Access Pass; the Yellowstone and Grand Teton Park Pass was \$50. Entrance fees were \$25 per vehicle/7 days. Campground fees continued at the same price \$12 or \$14 a night depending on amenities at the campground.

North	\$1,728,224
West	3,676,639
South	167,155
East	1,830,229
Northeast	775,026
Bechler	6,963
PLD	193,663
VSO	20,435
Subtotal	\$8,398,334.00
Campgrounds	535,438
<b>Fish Permits</b>	775,400
<b>Boat Permits</b>	24,395
<b>Total Fees Collected</b>	\$9,733,567

# Branch of Law Enforcement Services (BLES) Criminal Investigations

BLES Special Agents and US Park Rangers detailed to the BLES handled over 150 criminal investigations. These included 12 fatalities, a felony manslaughter case, numerous felony drug distribution cases, numerous aggravated assaults and Lacey Act/poaching cases, numerous 16 USC 19 jj

damage recovery cases, numerous felon in possession of firearms cases, a felony sex offender/failure to register case, a felony child sexual violence/exploitation case, felony and misdemeanor immigration violations cases, criminal fraud cases, felony theft of gov't funds, and a variety of other long term and complex cases. YELL Special Agents and Rangers obtained felony indictments/true bills on multiple cases at three of the six WY District Grand Jury Sessions. YELL Special Agents also provided investigative support to other parks in WY and MT, including Big Horn Battlefield, Grand Tetons NP, Glacier NP, and Grant Kohrs National Historic Site.

### Case Management/Court Services

The BLES continued to work with the US Attorney's Office and support the court service and case management operation. 2007 saw 643 docketed court cases, over 350 court appearances, 2,610 violation notices issued, 250 physical arrests, 47 tort claims filed, and over 1200 NCIC arrest warrants served or cleared since program inception in 2003. All of the BLES student interns were critical members of the case management and court services operation.

	2007	2006	2005	1990	1976
Part I	148	138	148	161	270
Part 2	4,087	4,036	4,815	2,760	2,031
Drug	128	115	207	na	na
Violation	2,610	2,605	3,371	2,417	549
Case	6,359	6,068	7,886	4,879	2,358
Court	350	374	229	157	50
Physical	250	260	252	126	29
Traffic	593	553	522	496	420
Personal	767	705	657	554	349
Fatalities	12	7	7	7	7
Property	\$3,799,606	\$3,785,250	\$3,675,000	\$1,550,600	\$380,450
Tort Claims	47	36	48	60	22
Auto	4	8	5	53	73
Firearms	39	31	32	29	11
Wildlife	5	10	11	10	na
DUI	66	56	64	68	na
Public	75	58	41	na	na
Minors in	264	288	170	na	na
Sale or Gift	24	25	12	na	na
Open	96	71	103	na	na
Alcohol in	8	2	17	na	na

# Assaults on Rangers

In 2007, Yellowstone reported twelve officer incidents (and thirteen victims) on its annual law enforcement report. These reflected assaults or attempted assaults on NPS law enforcement officers in the park.

### Special Response Group

The Yellowstone National Park Special Operations Group (SOG) is the Chief Ranger's primary critical incident response organization. It is commanded by Intermountain Special Agent in Charge/Yellowstone BLES Chief Brian Smith with Deputy Chief Ranger Tim Reid serving as deputy commander. There are three teams associated with the SOG:

☐ Special Response Team (SRT)
☐ Crisis Negotiation Team (CNT)
☐ Tactical Tracker Unit (TTU)

Yellowstone National Park created a tactical team in response to a 1989 incident at Old Faithful where a gunman took several visitors hostage. Due to Yellowstone's exclusive Federal jurisdiction and its remote location, the Chief Ranger at the time directed the establishment of a team that could manage incidents until additional resources arrive. The nearest mutual aid tactical team is located in Bozeman/Gallatin County, Montana, approximately 90 miles away. Over time, Yellowstone's SRT has increased its operational capabilities, training commitment, and adapted to fluctuating operator membership.

# Communications Center Accomplishments

In addition to supporting all park operations for all case numbers and incidents listed elsewhere in this document, the dispatch center also had the following accomplishments:

### E911

The E911 project continued with good progress being made towards addressing major areas of the park. Addressing of the upper tier of the park has been tentatively completed and submitted to GIS for temporary maps to be created for review by the team. A team meeting for planning has occurred. Areas have been contacted to begin addressing projects.

### CAD System

This season, the Communication Center completely implemented the new computer assisted dispatch system. This allowed the center to retire the old hand written radio log clipboards and move to a computerized logging system. This new system is tied to the NCIC system at this time. It has the capability to be tied to the new E911 system and down the road to the IMARS project, alarm system, GIS system, radio systems, camera systems and local system. This system has allowed the Communication Center to provide all park staff with better information about park operations. With the assistance of computer support services, the local system has been enhanced to provide better information to field units. They were able to post a read only copy of the program on the park net to allow the law enforcement staff access for investigation and statistical purposes.

### Regional Support

The Communication Center manager continued to

be a resource for the Intermountain Region. This support included assistance on the IMAR's Project, ORI research, warrant entry assistance, entry of stolen property, NCIC assistance for parks without NCIC, evaluation assistance to other parks, and on site reviews of operation. She provided four parks the Yellowstone Dispatch Operation Protocols and evaluation criteria for dispatchers. She assisted other parks in upgrading their protocols to meet NCIC and FBI requirements.

### National BLES and Support

The Communication manager continued to be a resource for the National Branch of Law Enforcement Services (BLES) office. This included coordination of the ATXP account, background and investigation support to all agents nationwide. Ongoing support for investigation and internal affairs were continued this past year. This service was also provided to our cooperators within Park County, Montana, for ongoing significant identity and fraud investigations. The warrant program continues to lead the way. Yellowstone dispatcher's timely entry of individuals allowed the NPS to apprehend and eventually convict individuals involved in a multi-state theft case. The Communication Centers' research into background checks facilitated the arrest and conviction of an out of compliance sex registrant who was working in the park. The Communication Center continues to be a part of the community policing team within the park.

#### **Corrals**

At the end of 2007, Corral Operations had approximately 102 head of horses and mules (76 geldings and 26 mules). One horse was sold at market due to an injured shoulder. One mule was lost at winter pasture. He was last seen on May 1 and one week later was missing. Numerous searches were done by Corral Operations, Trails and Ranger personnel with no sign of the animal. Flyers were put up in the surrounding area and a missing animal report was filed with the Montana Department of Livestock. There has still been no sign of this mule. Additionally, one new horse was purchased.

At the end of 2006, stock was distributed as follows:

YCR 17

Maintenance 27 Rangers 46 Corral Operations 12

Corral Operations started the year repairing the 200+ riding and packing equipment used by park staff in the field. It was a busy year for Corral Operations working bison. The operation started in January and hazed through mid June.

Corral Operations purchased 275 tons of large round bales for Stephens Creek and 80 tons of small bales for the interior. All hay in the park was certified weed free and purchased from vendors in the Gallatin and Paradise Valleys. Corral Operations also purchased four tons of grain, one ton of salt and two tons of mineral.

### Bison Management

Resource and Visitor Protection staff continued to implement the Interagency Bison Management Plan in 2007. Bison activity was intense in the West Management area this year with RVP staff involved in 88 hazing operations, both within and outside the park boundary. The West side operations included hazing bison an unprecedented distance back into the park—the last event depositing bison approximately 15 miles from the west boundary. RVP staff assisted the Montana Department of Livestock with the capture of a number of bison including calves of the year. Pursuant to a collaborative agreement between the Superintendent and the Governor of Montana, 57 of these animals were transported to the Stephens Creek facility and released back into the park a few days later.

North management area activities were relatively moderate with RVP staff conducting or assisting Montana DOL with 35 hazing operations.

RVP staff attended a wide variety of Bison Management meetings, briefings, and planning functions.

# **Backcountry Management**

	2005	2006	2007
# Backcountry Permits Issued	5,089	4,706	4,822
# People Use Nights	39,344	37,193	37,933
# Stock Use Nights	5,650	5,882	6,412
# Advanced Reservations	1,605	1,589	1,562

EMS & Search and Rescue

	2007	Avg (Prior 4 years)
EMS Incidents	715	665
Advanced Life Support Calls	330	253
Ground Transports	449	404
Life Flights	70	94

Resource and Visitor Protection managed 32 Search and Rescue incidents in 2007. Eight incidents were major (unprogrammed cost in excess of \$500) and seven were mutual aid assists to other agencies. Total 2007 SAR related expenditures were \$41,332.57. Park staff contributed 1,519.25 person hours to SAR incidents.

Yellowstone staff continues to provide SAR expertise regionally via search dog capability, avalanche rescue expertise, technical rescue capability, helicopter rescue capability, and All Hazard incident and search management skills.

# Youth Conservation Corps

Yellowstone's 2007 Youth Conservation Corps Program had a tremendous year with great continuity and outstanding leadership. Eleven of 13 staff returned from 2006 and led the students in their work, the environmental education program and in outdoor recreation. The commitment and character of the staff made them strong mentors for the students. The Yellowstone YCC experience provides the enrollees with a wide variety of opportunities for work skills development, an understanding and appreciation of the natural and cultural resources, to explore throughout the Yellowstone ecosystem, and to grow and develop into young adults.

# **Student Conservation Association**

A new SCA initiative, a partnership with colleges in Japan, resulted in 4 8-week student positions in Yellowstone. Our only funding obligation for these positions was to provide lodging. Two of these students worked with our resource management operations at Lake and two worked out of the O.F. backcountry office. Twenty-nine additional 12-week SCA positions provided Yellowstone with its largest contingent of SCA interns we've ever had. They support a variety of park operations including: visitor center operations, backcountry office and trail operations, our Fisheries program, Resource Management Operations, YCR GIS program, and Emergency Services.

One SCA Conservation Work Crew (6 students, 2 Leaders) worked for 4 weeks on the Bechler Canyon Trail. The crew was working approximately one mile north of Three Rivers Junction on an area of trail that had significant drainage and erosion problems.

# Montana Conservation Corps

Montana Conservation Corps crews were funded through a variety of sources including: trails grants through MT and WY, a grant through the Yellowstone Park Foundation and funds through the fuels reduction program. These crews completed 26 weeks of work throughout the park. The projects included: seven weeks along the South Rim of the Grand Canyon, Sportsman Lake Trail, Coyote Creek Trail, Norris Campground and Geyser Basin and 4 weeks doing fuels reduction work.

# Trails Significant Events

2007 saw large change and many events of interest for the operation. The greatest was placed within the realm of the Yellowstone Core Operations goals to attain greater efficiencies by reallocating and linking like-divisional resources. As part of the observance of these goals, the Backcountry Trails Operation was transitioned from the Maintenance division to the Resource and Visitor Protection division, with the harnessing of backcountry staffing resources and increased focus on wilderness issues being the impetus. As has always been the case, the operation will continue to work inter-divisionally on important park topics such as Deferred Maintenance, Asset Management, Resource Compliance and Visitor and Employee Safety.

Once again, 2007 saw the observation of National Trails Day in early June, and National Public Lands day in late September – where participating volunteers joined Backcountry Trails staff in celebrating with their passion, sweat, and camaraderie. The Hellroaring Creek and Ribbon Lake trails were the beneficiaries from the hard work of these dedicated groups where treadway, masonry and log drainage and retention structures were excavated and installed over two miles of trail. The days were a fun success for all and "the eatin' was good".

A trail project was also undertaken in conjunction with the celebration in Yellowstone of the 50<sup>th</sup> anniversary of the SCA in early September. Participating SCA alumni and Backcountry Trails staff reconstructed tread and placed drains and erosion control structures over the course of the Bunsen Peak trail.

Backcountry Trails staff was called-upon to perform Wildland Fire assignments on the Owl Fire and undertook Resource Advisor, crewmember and Rehabilitation Specialist roles over an eight week period. The operation sought emergency rehabilitation funding which was granted by the Regional Burned Area Emergency Rehabilitation Coordinator. Through this assistance, the rehabilitation of destroyed assets and

structures over a two mile span of the Sportsman Lake and Specimen Creek trails was completed.

#### Structural Fire

From 2003 through 2005, Structural Fire saw a decline in responses. In 2006 and 2007, there was an increase in total responses. There was an increase in false alarms at Old Faithful this year. This year the primary cause of false alarms was not due to system malfunctions and the primary cause was the occupants. Old Faithful had two major renovations. One is the continuing work at the Old Faithful Inn and the other is the Old Faithful Lodge, both of which contributed to the increase in false alarms. The Old Faithful Snow Lodge also contributed to the false alarms at Old Faithful.

Of the 308 responses, 52% were to a concession's building. Of the 159 responses to concession's buildings, 91% were false alarms. In comparison, of the 80 calls to NPS buildings 95% were false alarms. Structural Fire had 69 responses that did not involve a building with Rescues and Good Intent being the primary responses.

### Wildland Fire

Fire season 2007 was an average season in terms of number of wildfires. There were 27 fires in the park, the earliest being a lightning fire that started in mid-April. The last fire was a person caused fire that started on the  $22^{nd}$  of September.

There were several notable successes in the 2007 season. The highlight would be the opportunity to manage multiple large fires using the full spectrum of response types.

For example, the Owl Fire was started by lightning on July 20 on the park's west side. From the onset, this was a suppression fire due to the potential threat to the communities just beyond the park's north boundary. A type 2 management team was assigned and by the time they left two weeks later, the fire burned over 2800 acres.

# Interpretation, Education and Partnerships

### **Overview**

Chief of Interpretation Diane Chalfant was selected for a new position in WASO as Assistant Associate Director for Visitor Experience. She completed FY 2007 as Chief, and left Yellowstone NP early in FY 2008 to begin her new job. Other staffing changes included the departure of Grant Subdistrict Interpretive Ranger Will Yavorsky, who moved to the U.S.S. Arizona Memorial; Canyon Subdistrict Interpretive Ranger Beth Taylor, who moved into the Division's Curriculum-based Education Program; Web Program Manager Tom Cawley, who resigned from that position to become a Web Specialist; Budget Analyst Colleen Watson, who moved to a position with the U.S. Forest Service; and Administrative Assistant Karen Angermeier, who accepted a position with the U.S. District Court of Wyoming. Joy Perius moved from Yellowstone's Finance Office to become the Division's Budget Analyst, and Craig Johnson became Acting Web Program Manager. Sally Plumb, formerly a member of the Education Program staff, was hired as the Interpretive Planner, a position last held by Beth Kaeding.

In general, park visitation for calendar year 2007 started on a fast pace and stayed high throughout the period. By year's end, the park had set a record for visitation at 3,151,342 visitors. This was up 9.8% from 2006. Increased visitation resulted in increased participation in and use of interpretive media and services in all categories.

### Visitor Center Projects

FY 2007 marked the first full year of operating the new Canyon Visitor Education Center, which was dedicated and opened to the public on August 25, 2006. The exhibits and interpretive media drew enthusiastic reviews from a wide spectrum of visitors and scientists. The first full year of operations also provided many challenges in terms of exhibit, theater, and media maintenance. Heavy visitor use combined with frequent electrical blackouts and brownouts caused damage to exhibits, and computer-driven systems sometimes partially or completely shut down. However, much was learned in the process of keeping everything up and running, and the longer term cycles of maintenance will become easier as experience provides a better understanding of problem causes and solutions.

The Old Faithful Visitor Education Center moved rapidly through a total redesign of the facility. This was triggered when construction bids for the former building came in significantly over the project budget. Throughout FY 2007, redesign progressed on a fast timeline and the Wyoming SHPO was consulted regarding the new design. Exhibit planning and design was placed on hold while the new building took shape. Exhibit spaces were reduced from two floors to one floor, and the total exhibit square footage from approximately 7,000 s.f. to 4,800 s.f. All tracks of the building's redesign were targeted toward completion by late 2007.

Construction of the West Yellowstone Visitor Information Center addition moved forward on the established timeline toward completion by summer, 2008. This addition will provide improved visitor information and orientation services at the park's West Entrance, which is typically the busiest entrance to Yellowstone National Park during the summer and winter seasons.

Planning for a major renovation of the Albright Visitor Center in Mammoth Hot Springs continued, with further development of a space plan and functional rearrangement of public and administrative areas. Funding for the renovation is to be provided through the National Park Service's Line Item Construction Program and the target year is FY 2010.

# Planning & Media Branch

### Exhibit Program

The Exhibit Specialist completed the planning and design of 12 new interpretive trailside exhibits for Norris Geyser Basin; installed 9 exhibits at the Canyon VEC Backcountry Office that she had planned and designed in the previous year; installed a previously designed exhibit on the Mission 66 era and former Canyon VC at a prominent outdoor location near the new VEC; moved 53 additional wayside exhibits through various phases of planning and design; and monitored/maintained the park's 330 existing wayside and trailside exhibits.

As noted in other reports, precise counts of visitor use of exhibits are impossible to obtain for many reasons. However, reasonable estimates of visitor use can be made from a variety of data. Based upon public use of the park's visitor centers, the numbers of people in major developed areas, and traffic studies, we conservatively estimate that **exhibits accounted for some 12 million visitor contact episodes.** Another way of understanding this number is that every Yellowstone National Park visitor likely used at least one exhibit on 4 different occasions during a typical visit. Observation of actual behavior suggests that this number is much higher. Also, visitor's rate exhibits in the highest category of desired services. They constitute one of the most cost effective a method of serving Yellowstone's 3 million annual visitors.

### **Publications Program**

During FY 2007, the Publications Specialist produced **40 unique publications.** These included four editions of the official park newspaper *Yellowstone Today*, the 2007 *Resources and Issues Handbook*, eight self-guiding trail booklets used at major park attractions such as the Grand Canyon of the Yellowstone and Old Faithful Geyser area, and visitor trip planning guides. Park newspaper "wrappers" in six languages (Spanish, German, French, Japanese, Mandarin, and English) were produced, and significant support was provided to the production of reports for the Reengineering Resource Compliance team.

Publications serve a vast and diverse audience of park visitors and the general public. During FY 2007, **3,079,810 publications provided 13,549,087 visitor use episodes** (estimates based upon calculations used in such offices as VSO to determine park entrance statistics). Along with other interpretive media, publications are the most cost-effective means of providing services that are highly valued by YNP visitors.

# Web/Internet Program

The Web/Electronic Publishing Program: develops, maintains, and evaluates Yellowstone National Park's official web site; works closely with all park divisions, offices, and partners to acquire and develop information and content, and maintain accuracy; delivers high impact, high quality, and diverse interpretive and educational products to millions of users; and strives to present a "virtual park experience" to a global audience and to fulfill broader mandates relative to "e-government" and transparency of government institutions.

Yellowstone National Park's official web site is the **single largest web site in the NPS system**, being comprised of some **9,000 HTML pages**. Based upon 6 months worth of statistical data (the new Site Catalyst web stats system became functional during the last half of the fiscal year), web use by the public during FY07 was calculated at **22,718,642** in FY 2007. This figure does not account for visits to portions of the web site that do not reside in CMS, including all web videos, webcams, electronic field trips, and other multimedia features. Therefore, actual web use is exponentially higher but nearly impossible to accurately count within the current system. Finally, Site Catalyst reported visits from 213 countries worldwide. In September 2007, the top countries with the most web visits were (in order) Canada, the United Kingdom, Germany, Australia, France, Japan, Netherlands, Ireland, Italy, and Spain.

During FY2007, Web office staff completed the Phase I conversion of the official web site into the CMS system; developed, produced, and posted 32 new web videos that are also available as podcasts and continued developing 46 additional web videos; provided assistance to 30 NPS units requesting help with establishing web video programs; developed, produced, and posted 4 science minidocumentaries, each of which included additional bonus features; developed an extensive research function associated with each video and minidocumentary; and installed the park's first live streaming web cam at Old Faithful Geyser. The Old Faithful Virtual Visitor Center continued to be developed even though National Science Foundation funding for positions exclusively dedicated to it had ended by September, 2007. In addition, the largest web site in the NPS system was continuously monitored, maintained, and updated. Given the number of HTML pages and thousands of files of material, this task alone is a major annual workload and accomplishment.

# Photography/Videography Program

The slide scanning and digitization project continues to make great strides in converting this highly valuable and widely used park resource into a fully digital image collection. By the end of the fiscal year,

over **13,000 images** were available to the public via the park's official web site. The index page which provides access to these images is always among the top 5 most visited YNP web pages.

Other Highlights: The Park Photographer/AV Specialist spent significant amounts of time troubleshooting the Canyon VEC theater and exhibits. Repeated problems with theater electronics required extensive consultation with theater and electronics contractors to track down problems with the complex equipment and systems that run the interpretive media at Canyon VEC. Experience gained from the many problems and repairs was integrated into maintenance manuals, and additional essential support was provided for other exhibit repairs and troubleshooting. In addition, this office responded to over 200 requests for services from all park divisions, including photographing wildfires and other natural events or occurrences, special events, training, documentation of accident or incident scenes, presentations to university groups, and support for major interpretive facility and media development projects as well as for interpretive programs and activities that are developed and offered by all Division staff. The Photographer also provided technical support for audiovisual infrastructure in all 5 major visitor centers and 4 contact stations, plus 7 campground amphitheaters.

# Interpretive Programs Operations Branch

Park interpretive rangers provided information and orientation to **2,860,264 visitors** at **13 different visitor centers, museums, and warming huts.** They presented **7,009** formal interpretive programs to **255,082 visitors** participating in walks, talks, hikes, and evening programs. Interpretive rangers provided informal interpretation (also known as "roving" interpretation) at critical resource locations throughout the park including geyser basins, wildlife jams, picnic areas, and campgrounds. Informal interpretive activities resulted in **305,175 visitor contacts.** 

The **Ranger Adventure Hikes**, a cost-recovery program, served **1,888 visitors** and paid for the interpretive park rangers presenting the programs. The park continues to receive complimentary letters from the public about this program.

This year, a total of 17,784 children and their families were served through the two-tiered age group Junior Ranger Program and Young Scientist Program, the latter being available at Canyon and Old Faithful for the first time. These programs are managed by the Formal Education Branch, with publication production services provided by the Planning and Media Branch, and program delivery provided by the Field Operations Branch. 10,857 Junior Rangers and their families participated in programs at the Junior Ranger Station, located in the former Madison Museum building.

The **Elk Corps Volunteer Program** was again successful in reducing autumn rut-related incidents involving elk-human conflicts in the Mammoth area. This was the fourth year of this project that operated with volunteers from early September through mid-October in the Mammoth Hot Springs Subdistrict. Volunteers assisted in controlling crowds, creating a safe wildlife viewing environment for visitors while protecting wildlife, and providing critical resource information to park visitors. Four volunteers were hired for months of September and October, 2007. Volunteers provided information to **12,513 visitors** and **resource warnings** for being too close to elk **to 4,161 visitors** during FY07.

The **Wolf Education Ambassador Program continued in FY 2007.** Funded by the Yellowstone Park Foundation, One SCA and one interpretive park ranger provided educational information at the locations where wildlife and visitors interacted, informed visitors about wolf habituation, enhanced visitor and wolf safety, and reduced visitor/animal conflicts. The Wolf Education Ambassador Program has made **40,425 educational contacts** to date. They gave **4,449** verbal warnings to visitors who got too close to wolves or

otherwise disturbed wolf movement. The team presented 33 formal interpretive talks and evening programs. These programs were attended by 3,392 visitors.

The **Gateway Community Outreach Program** continued to be a valuable communication tool for park management in FY07. District interpretive staff attended **58 community meetings** in the tri-state area, making **2,192 professional contacts** through attendance at Chamber of Commerce meetings, civic organization meetings, and special event shows in the region. The goal of this program is to continue to develop and maintain positive, mutually respectful, and beneficial relations with park gateway communities located in Montana, Idaho, and Wyoming.

**The Bear Safety through Education Program** was conducted at a reduced level than in past years, as no non-NPS funding was obtained. A total of **42,289 visitors were contacted** during summer 2007. This includes 7,275 formal program contacts. 5,477 warnings were issued to visitors for getting too close to bears and food storage violations. To date, interpretive park rangers have contacted more than 300,000 visitors through this program.

### Formal Education Branch

**Day use programs** were offered in FY07 as staff time allowed. A total of 154 programs were presented for **4,104 contacts**.

Two Teacher Workshops were conducted as pilot programs in FY07. Topics presented were Wolves in Yellowstone and the No Child Left Indoors. Also, a **Cross Cultural Exchange** experience was offered to Crow Tribal youth and elders. This week-long residential experience brought 12 Crow eighth graders, three elders, and two chaperones to the park where two NPS instructors provided an overview of park resources combined with Crow heritage as presented by elders.

In FY07, **1,097** students and teachers representing under-served audiences received scholarships to attend the residential education program, *Expedition:Yellowstone!*. These scholarships were secured by the Formal Education Program staff working closely with Yellowstone Park Foundation.

Five **ParKids day camps** were conducted during summer 2007. These were funded by three grants through the **Yellowstone Park Foundation** and a donation from the Yellowstone Park School. Communities reached include: **West Yellowstone**, **Pray**, **Livingston**, **Cody**, **and Mammoth/Gardiner**. ParKids has established itself as a valued and beneficial NPS gateway community outreach program.

# Safety

The Division had no DART injuries (Days Away Restricted or Transferred), no continuation of pay injuries, and only three personal injuries while striving for zero accidents in the workplace. There were **no lost time accidents** in the Division of Interpretation in 2007. In addition, all of the Job Hazard Analyses for the Division were reviewed for accuracy. The Division completed **517 safety tailgate sessions and 130 safety observation** checklist forms for employees/facilities.

### Other

The Deputy Chief of Interpretation, Planning and Media Branch, served as coordinator for the Reengineering Resource Compliance Team, an interdivisional team of staff who were charged with developing alternatives to improve natural and cultural resource compliance in Yellowstone National Park. This required extensive communication with Team members, park staff in all divisions, and the Management Team in order to obtain information and develop recommendations. As a result of the work

of this group, a reorganization of cultural and natural resource compliance staff was initiated in late FY2007, and a new compliance process and organizational structure was adopted by Management.

Division staff also served as Fire Information Officers during the wildfire season of 2007. Other interdivisional work groups on which staff actively served were the Research Permit Team, the Environmental Management Systems group, and the parkwide Safety Council. Core Operations Analysis, a major parkwide budget and planning exercise, consumed significant amounts of the work year and time of the Chief and both Deputy Chiefs, as well as the Division's Budget Analyst.

# **Conclusion**

With the support of the regional office in 2007, two deputies were selected to assist the Superintendent. Deputy Superintendents Colin Campbell and Chris Lehnertz joined the Yellowstone Management Team in February and quickly settled into their many faceted portfolios. Major emphasis continued on issues including the implementation of the Interagency Bison Management Plan, Core Operations implementation and preparing a long-term winter use plan. Yellowstone and Grand Teton National Park operated for the third and final year under a temporary winter use plan that was approved in November 2004.

Visitation to the park was on a record-breaking pace throughout the year—culminating with an all-time annual recreation visitation high of 3,151,342 visits, up 9.8 percent from 2006. The previous record was set in 1992 at 3,144,405 visitors.

Yellowstone National Park, in partnership with the Yellowstone Park Foundation, launched the *Yellowstone Environmental Stewardship Initiative*. This initiative will dramatically improve the park's environmental performance with a focus on significant reduction in greenhouse gas emissions. In April 2007, the U.S. Fish and Wildlife Service (USFWS) announced that the Greater Yellowstone Ecosystem (GYE) grizzly bear population segment had recovered sufficient numbers and distribution to be removed from threatened status under the Endangered Species Act. Grizzly bear management in YNP has not changed significantly as a result of delisting. Park staff continues to protect bear habitat and emphasize prevention of bear-caused property damage, bear-inflicted human injuries, and human-caused bear mortalities through public education, sanitation, storage of human foods and garbage in a bear-proof manner, and enforcement of bear management food and garbage storage regulations.

As a result of the Core Operations analysis completed in 2007, a minor reorganization was conducted. Yellowstone consolidated from seven to six divisions by splitting the Planning, Compliance and Landscape Architecture Division into its separate functions. Compliance processes were reengineered and moved to the Yellowstone Center for Resources. The roads program was fully encapsulated in the Maintenance Division, and the Superintendent's office became the new home for planning. The culminating year of several efficiencies achieved by the park, 2007 reflected a three-year cost savings of just over \$2 million in ONPS dollars.

Finally, in keeping with our highest mission objectives, a new report on the ecological integrity of Yellowstone National Park was designed. Known as the "Vital Signs Report to the Superintendent" the report was developed by Yellowstone staff with support from the Greater Yellowstone Network Inventory and Monitoring (GRYN I&M) program and monitoring partners. Vital signs are physical and biological resources and processes that represent a mosaic of ecosystem health. The vital signs were identified for Yellowstone through collaboration with the GRYN I&M program, with more than 400 scientists and managers informing the selection and priority. The report to the Superintendent will be the first

comprehensive Vital Signs report for any park in the system. While it is too early to have results for many of the start-up Vital Signs, there will be enough results to complete the first report in 2008. The report will paint an emerging picture of the ecosystem condition, stressors, landscape scale indicators and specific resource issues (e.g. bison, white bark pine) that will help the Superintendent and all park managers better preserve the vial park resources.